

ABSTRACT OF THE DISCLOSURE

A memory disambiguation method and system that provides accurate memory disambiguation and is efficient in compile time and memory usage. The method preserves high-level and intermediate-level semantics and other information necessary for disambiguation in a new structure called a disam token. The disam token and a symbolic memory reference representation associated with it are also the means by which the various memory disambiguation modules and their clients communicate, forming the basis of a complete memory disambiguation system. The method includes an algorithm for creating and maintaining the disam tokens and disambiguation information and an algorithm for applying various disambiguation rules that utilize the information during program and/or module compilation.